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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,137	01/24/2002	Brooke L. Small	09/660450US1	3174
37814	7590	11/22/2005	EXAMINER	
CHEVRON PHILLIPS CHEMICAL COMPANY			DANG, THUAN D	
5700 GRANITE PARKWAY, SUITE 330			ART UNIT	
PLANO, TX 75024-6616			PAPER NUMBER	

1764

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/056,137

Applicant(s)

SMALL ET AL.

Examiner

Thuan D. Dang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 19 and 29-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 19, 29-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

The amendment filed on 9/8/2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: “unreacted monomer”, “about 27 to about 85 weight percent of the dimers”, “about 18.5 to about 80 weight percent unreacted monomer”, have no support from the specification of this application.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-9, 19, and 29-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1, “about 27 to about 81 weight percent of which are linear internal dimers” and “from about 18.5 to about 80 weight percent initial and second olefins” are new

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matter since nowhere in the specification define the term “about” used for these number. Further, nowhere in the specification discloses the percentage of the initial and second olefins present in the claimed product.

Regarding claim 31, “from about 18.5 to about 80 weight percent initial and second olefins” is a new matter since nowhere in the specification define the term “about” used for these number. Further, nowhere in the specification discloses the percentage of the initial and second olefins present in the claimed product.

Regarding claim 35, “about 27 to about 81 weight percent linear internal dimers” is a new matter since nowhere in the specification define the term “about” used for these number.

Regarding claim 36, “from about 18.5 to about 80 weight percent first and second olefins” is a new matter since nowhere in the specification define the term “about” used for these number. Further, nowhere in the specification discloses the percentage of the first and second olefins present in the claimed product.

Regarding claim 40, “about 27 to about 81 weight percent linear internal dimers” is a new matter since nowhere in the specification define the term “about” used for these number.

Regarding claim 43, “about 27 to about 81 weight percent of which are linear internal dimers” and “from about 18.5 to about 80 weight percent initial and second olefins” are new matter since nowhere in the specification define the term “about” used for these number. Further, nowhere in the specification discloses the percentage of the initial and second olefins present in the claimed product.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9, 19, and 29-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 31, 35, 36, 40, and 43, terms “about” which is inserted before weight percentage such as “27”, “81”, “18.5”, “80” cannot be interpreted since nowhere in the specification define how much the term can cover.

Regarding claims 32, 35, 40-42, the term “dimers” lack a clear antecedent basis.

Claim 31 is a product claim. However, the claim does not recite any component is a desired product produced by the process. Note that vinylidene or tri-substituted olefins are undesired by-product, the initial and the seconds are reactants.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-9, 19, and 29-43 are rejected under 35 U.S.C. 103(a) as obvious over Small et al (6,291,733).

Applicants claim a product by process (see claims).

Small discloses a product containing such as 64 wt% of linear internal olefinic dimers, less than 5 wt% of vinylidene, methyl-branched dimers which is produced by dimerization of olefins having 4 to 36 carbons with a conversion of such as 22%.

The examiner cannot decide the conversion on table 1 of Small is applied to the conversion of the reactants to (1) dimers and all others or (2) to dimers only. In the case of (1), the amount of unreacted reactants in the Small product must be lie inside the range of about 18.5 to about 80 wt% in the claimed product. In the case of (2), the examiner cannot decide.

Assuming arguendo that the conversion in table 1 were applied only to the conversion of reactants to the dimers, the product of Small might not have the amount of unreacted olefins as in the claimed products.

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However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Small product by converting only a part of reactants to produce a product having the amount of unreacted reactants as the applicants' claimed product according to the desired composition of the desired product.

Applicants claim that the dimers are produced by coupling of initial olefin and second olefin. However, a product-by-process is a product. Although the cited reference does not teach the process steps as recited, these process steps are however not given patentable weight since the invention in a product-by-process claim is a product, NOT a process. *In re Bridgeford*, 357 F2d 679; 149 USPQ 55 (CCPA 1966). It is patentability of the product claimed and NOT of the recited process steps which must be established. *In re Brown*, 459 F2d 531; 173 USPQ 685 (CCPA 1972).

Response to Arguments

Applicant's arguments with respect to all claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan D. Dang whose telephone number is 571-272-1445. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thuan D. Dang
Primary Examiner
Art Unit 1764

10056137.20051118

A handwritten signature in black ink, appearing to be 'Thuan D. Dang', written over a horizontal line.